Attachment L.5– Landfill Capping System

Organisation Name:* Knockharley Landfill Limited

Application I.D.:* LA004307

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1. Landfill Capping System

The final profile will be a maximum of 85 m Ordnance Datum (OD) and be a domed shape. When the final fill level is reached in each cell it is temporarily capped for 12 months to allow settlement pending the installation of the final cap.

The final cap design, which has been agreed with the Agency in accordance with Condition 4.3.1 (W0146-02) comprises an under liner geocomposite for the management of gas and / or leachate, a 1 mm fully welded LLDPE liner, sub-surface drainage layer, subsoil layer and topsoil layer. The overall thickness of the soil layers is 1 m.

Daily Cover

The working face is covered with 150 mm of suitable material at the end of each working day. Adequate stockpiles of cover are maintained on-site at all times. The active fill area is inspected dailyand where it is found that the cover has been eroded, washed off or otherwise removed it is replaced by the end of the working day. The covered wastes are not excavated or disturbed, with the exception of works associated with the installation of the landfill gas collection system.

IBA Area

Temporary covers (e.g. HDPE sheeting) and / or sprays that willbond surface fines into a cohesive layer will be used to control dusts. If the recovery trials do not prove successful and/or sustainable outlets for the processed IBA cannot be found a permanent cap will be installed over Cells 28 to 32to the same specification as that applied at the non-stabilised cells.

Stability Assessment

A stability assessment of the landfill is carried out annually in accordance with Condition 8.12.1 of the licence (W0146-02). If settlement is found to be interfering with either the integrity of the cap, or run-off from the landform, measures are taken to either reinforce the cap, or re-profile the landform.